As cholera returns to Haiti, blame is unhelpful

After a century with no cases of the disease reported in Haiti, on October 21, the US Centres for Disease Control and Prevention (CDC) confirmed that cholera had returned to the country, the poorest in the western hemisphere. As if the picture was not depressing enough for the nation, in which more than 1 million people are still homeless following January's earthquake, the country was then ravaged by Hurricane Tomas on November 5. Cholera is easy to prevent and treat with access to clean water, sanitation, and appropriate rehydration therapy. But in a country in Haiti's current predicament, what can be done to stay the spread of the so-called painless killer?

In the wake of natural disasters, such as the Haiti earthquake or the floods in Pakistan earlier this year, disease epidemics, along with injuries and food shortages, pose some of the most serious health risks. In preparation for these events, within 2 weeks of the Haiti earthquake, the Ministry of Public Health and Population, Pan American Health Organization, and CDC had established a National Sentinel Site Surveillance system involving 51 centres in Haiti's ten departments. The system was designed to track the occurrence of non-infectious disorders, injury, and infectious diseases. The most commonly reported disorders were respiratory infection, suspected malaria, and fever of unknown cause. But then cholera appeared. The disease first struck in the Artibonite area, which had largely escaped earthquake damage, but had become home to many of the people displaced by earthquake damage and to international aid workers. Indeed, the strain of *Vibrio cholerae* seems to be a south Asian strain, and Nepalese aid workers in the region have been implicated as the source, leading to protests against their presence and some people calling for them to leave the country.

Outbreaks of cholera may seem inevitable after natural disasters; but this is not the case. Indonesia and other parts of south and southeast Asia are affected by the ongoing pandemic that started in 1961, but no major cholera outbreaks struck after the 2004 tsunami. The disease is hugely unpredictable: despite having been spared from the current pandemic, in 1991 the disease hit Peru, causing more than 300 000 cases that year, but no more cases have been reported since 2003. This waxing and waning of cholera outbreaks is a familiar picture that hampers prevention and treatment. Because the disease mostly affects poor countries with competing health priorities, surveillance, stocks of salts, and the appropriate infrastructure lapse once an epidemic has passed. Thus, when outbreaks develop after a period with little disease activity, case fatality, which should be less than 1%, is unacceptably high. In outbreaks in Mali in the mid 1990s, more than 10% of patients died, and in the Zimbabwean outbreaks of 2008–09, against a backdrop of a health infrastructure crippled by mismanagement and political negligence, in some regions over 50% of patients died.

Although cholera affects more than 3 million people a year and kills up to 120 000, vaccine development for cholera has been slow. Only one vaccine (Dukoral) has been prequalified by WHO, and although another (Shanchol) has shown effectiveness in trials in Vietnam and India, WHO has not yet given this prequalification status, and it is not widely licensed for use. Both vaccines require two doses given days apart, which in disaster situations among internally displaced populations limits their usefulness. Furthermore, the immediate priorities after natural disasters, such as provision of food, shelter, and sanitation take precedence.

At the time of going to press, Haiti has recorded over 9123 cases of the disease with 583 deaths, a case fatality of more than 6%. The death toll is likely to be much higher in camps housing internally displaced people left homeless by the earthquake. Since the disease has now reached the Dominican Republic and slums on the outskirts of Port-au-Prince, in which access to sanitation and health care is even worse than in camps set up and monitored by aid agencies, the situation could be much worse by the time the journal is published. We hope that the activities of the ministry of health, international health partners, and aid agencies are able to limit the impact of cholera by providing access to the rehydration therapy needed to reduce case fatality and by surveillance so that sanitation, education, and access to clean water can be improved ahead of the advancing disease. Although interest in how the outbreak originated may be a matter of scientific curiosity for the future, apportioning blame for the outbreak now is neither fair to people working to improve a dire situation nor helpful in combating the disease. ■ *The Lancet Infectious Diseases*

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